Table R-2: U.S Greenhouse Gas Inventory Source Categories Based on Tier 1 Approach

IPCC Source Categories	Direct GHG	2001 Emissions (Tg CO_2 Eq.)	Key Source Category Flag?	ID Criteria [1]	Comments
Energy					
CO_2 Emissions from Stationary Combustion - Coal	CO_2	1,993.8	✓	L, T	All years
CO_2 Emissions from Stationary Combustion - Oil	CO_2	671.6	✓	L, T	All years
CO_2 Emissions from Stationary Combustion - Gas	CO_2	1,168.2	✓	L, T	All years
CO_2 Emissions from Stationary Combustion – Geothermal	CO_2	0.4			
CO_2 Emissions from Natural Gas Flaring	CO_2	5.2			
Non-CO_2 Emissions from Stationary Combustion	CH_4	7.4			
Non-CO_2 Emissions from Stationary Combustion	N_2O	14.2			
Mobile Combustion: Road & Other	CO_2	1,538.7	✓	L, T	All years
Mobile Combustion: Road & Other	CH_4	4.1			
Mobile Combustion: Road & Other	N_2O	52.6	✓	L	All years
Mobile Combustion: Aviation	CO_2	183.9	✓	L, T	All years
Mobile Combustion: Aviation	CH_4	0.1			
Mobile Combustion: Aviation	N_2O	1.8			
Mobile Combustion: Marine	CO_2	58.3	✓	L	Level in 1990 - 1997, 1999 - 2001
Mobile Combustion: Marine	CH_4	0.1			
Mobile Combustion: Marine	N_2O	0.3			
Fugitive Emissions from Coal Mining & Handling	CH_4	60.7	✓	L, T	All years
Fugitive Emissions from Natural Gas Operations	CH_4	117.3	✓	L, T	All years
Fugitive Emissions from Oil Operations	CH_4	21.2	✓	T	
Industrial Processes					
CO_2 Emissions from Cement Production	CO_2	41.4	✓	L, T	All years
CO_2 Emissions from Iron and Steel Production	CO_2	59.1	✓	L, T	All years
CO_2 Emissions from Lime Production	CO_2	12.9			
CO_2 Emissions from Limestone and Dolomite Use	CO_2	5.3			
CO_2 Emissions from Ammonia Produciton and Urea Application	CO_2	16.6	✓	T	
CO2 Emissions from Titanium Dioxide Production	CO_2	1.9			
CO_2 Emissions from Ferrolloys	CO_2	1.3			
CO_2 Emissions from CO_2 Consumption	CO_2	1.3			
CO_2 Emissions from Soda Ash Manufacture and Consumption	CO_2	4.1			
CO_2 Emissions from Aluminum Production	CO_2	4.1			
CH_4 Emissions from Silicon Carbide Production	CH_4	+			
CH_4 Emissions from Petrochemical Production	CH_4	1.5			
N_2O Emissions from Adipic Acid Production	N_2O	4.9	✓	T	
N_2O Emissions from Nitric Acid Production		17.6			
N_2O Emissions from N_2O Product Usage	N_2O	4.8			
PFC Emissions from Aluminum Production	PFCs	4.1	✓	T	

SF_6 Emissions from Magnesium Production	SF_6	2.5			
SF_6 Emissions from Electrical Equipment	SF_6	15.3	✓	L, T	Level in 1990 - 1991, 1993 - 1995
HFC, PFC, and SF_6 Emissions from Semiconductor Manufacturing	Several	5.5			
Emissions from Substitutes for Ozone Depleting Substances	Several	63.7	✓	L, T	Level from 1997 - 2001
HFC-23 Emissions from HCFC-22 Manufacture	HFCs	19.8	✓	L, T	Level in 1990, 1992, 1996, 1998
Agriculture					
CH_4 Emissions from Enteric Fermentation in Domestic Livestock	CH_4	114.8	✓	L, T	All years
CH_4 Emissions from Manure Management	CH_4	38.9	✓	L	Level in 1991 - 1999
N_2O Emissions from Manure Management	N_2O	18.0			
Direct N_2O Emissions from Agricultural Soils	N_2O	216.6	✓	L	All years
Indirect N_2O Emissions from Nitrogen Used in Agriculture	N_2O	77.7	✓	L, T	All years
CH_4 Emissions from Rice Production	CH_4	7.6			
CH_4 Emissions from Agricultural Residue Burning	CH_4	0.8			
N_2O Emissions from Agricultural Residue Burning	N_2O	0.5			
Waste					
CH_4 Emissions from Solid Waste Disposal Sites	CH_4	202.9	✓	L, T	All years
CH_4 Emissions from Wastewater Handling	CH_4	28.3			
N_2O Emissions from Wastewater Handling	N_2O	15.3			
CO_2 Emissions from Waste Incineration	CO_2	26.9	✓	T	
N_2O Emissions from Waste Incineration	N_2O	0.2			

[1] Qualitative criteria.

+ Does not exceed 0.05 Tg CO_2 Eq.

Notes: Sinks (e.g., LUCF, Landfill Carbon Storage) are not included in this analysis. The Tier 1 approach for identifying key source categories does not directly include assessment of uncertainty in emissions estimates.